Blackfoot River TMDL Implementation Plan

BLM----Pocatello Field Office

I. Existing Condition

In 1993 and 1994 the Bureau of Land Management (BLM) funded a Riparian and Wetland Project conducted by the University of Montana on the Blackfoot River and its tributaries on reaches which run through public lands. (See accompanying maps for locations of these studies and BLM spot checks.) The tributaries they examined were Beaver Creek, Jones Creek and its tributary, Negro Creek, Grave Creek, Brush Creek, Rawlins Creek, Deadman Creek and Wolverine Creek. In addition, the BLM has conducted several spot studies on the Blackfoot River, Wolverine Creek, Jones Creek and a tributary to Brush Creek in 2000, 2003 and 2004. These spot checks represent isolated locations on the water ways and are not meant to characterize the entire reach.

A. High Priority Streams

1. <u>Blackfoot River</u>

Of approximately 29.8 miles of the Blackfoot River below Blackfoot Reservoir which were examined by the University of Montana, 9.3 miles were rated as Nonfunctional, 16.1 miles were rated as Functional at Risk, and 3.7 miles were rates as Proper Functioning Condition. In 2000, the BLM conducted two spot checks on two unnamed tributaries to lower Blackfoot River and found them to be Functional-at-Risk. In 2003, the BLM conducted eight spot checks on the lower Blackfoot River and observed it to be Non-Functional in three locations, and Functional-at-Risk in five locations. In 2004 the BLM conducted studies at the same eight sites and found the river to be Non-Functional in one location, Functional-at-Risk in five, and Proper Functioning Condition in two locations, bearing in mind that spot checks represent isolated locations and not the entire reach of the river. In 2000, the BLM conducted spot checks at two locations on the Blackfoot River above the Reservoir, and it was found to be Functional-at-Risk, and Proper Functioning Condition.

2. Wolverine Creek

Of 2.7 miles of Wolverine Creek examined by the Montana University, in 1993, approximately 1.3 miles of it was Non-Functional, and 1.4 miles was in Functional-at-Risk. In 2004, the BLM conducted a spot check on Wolverine Creek and found it to be in Proper Functioning Condition. It is unclear why there is a dramatic change in condition, but it may be a result of examining an isolated location which is not representative of the entire reach.

3. Jones Creek

Of 1.73 miles of Jones Creek and its tributary examined by the University of Montana in 1993, all was found to be Non-Functional. In 2004, the BLM conducted a spot check on Jones Creek and found it to be Functional-at-Risk.

B. Medium Priority Streams

1. Remaining 303(d)-Listed Streams within the Watershed:
Brush, Dry Valley, Lanes, Meadow and Trail Creeks

Of 0.4 miles of Brush Creek examined by the University of Montana in 1993, all was Non-Functional. BLM has no updated information for the other streams listed here.

C. Low Priority Streams

1. Remaining Unlisted Streams within the Watershed

In 2000, the BLM examined Smiley Creek, a tributary to Brush Creek, and found it to be Functional-at-Risk. Of 0.8 mile of Negro Creek examined by the University of Montana in 1993, 0.5 mile was found to be Functional-at-Risk, and 0.3 mile was found to be in Proper Functioning Condition. Of 0.3 mile of Grave Creek examined by the University of Montana in 1993, all was found to be Non-Functional. Of 0.3 mile of Deadman Creek examined by the University of Montana in 1993, all was found to be Non-Functional.

II. Management Actions Proposed/Projected to Reduce Sediment Impacts

A. High Priority Streams

1. Blackfoot River

The 1988 Pocatello Resource Management Plan (RMP) proposed that the BLM: "Reinstate the primary use of the area as a stock driveway, restrict overnight use of riparian zones by trailing livestock, maintain bed-sites at appropriate intervals remove fences interfering with livestock movement, develop water sources where possible, limit utilization on key forage species on steep slopes to 50%, reseed areas of agriculture trespass." If other management practices do not produce the desired results, the RMP management alternative directs the BLM to "cancel all grazing privileges associated with (these) allotment(s) and fence along the driveway boundary, and install signs clearly indicating the public land lines." These proposals continue to give guidance to the BLM's management practices on the Blackfoot River. The BLM has built a quarter mile exclosure fence around a sensitive upper reach of Negro Creek in order to reduce erosion and sediment runoff, and has built a nearby exclosure to restrict livestock from an area adjacent to the Blackfoot River so that baseline data can be collected for riparian response to grazing management.

2. Wolverine

The 1988 Pocatello Resource Management Plan proposed that the BLM: "Remove livestock from the riparian habitat, exclude livestock grazing from Wolverine Creek for at least three seasons, construct fences to keep livestock out from the riparian area, and limit utilization on key forage species on steep slopes to 50%." If other management practices fail, the BLM may "adjust the stocking rate to greater than 5 acres/AUM." These management alternatives continue to give guidance to the BLM's management practices on Wolverine Creek.

Jones Creek

The 1988 Pocatello Resource Management Plan proposed that the BLM: "Limit utilization on key forage species on steep slopes to 50%." This proposal continues to give guidance to the BLM's management practices on Jones Creek.

B. Medium Priority Streams

1. <u>Brush, Dry Valley, Lanes, Meadow and Trail Creeks</u> Nothing is proposed outside of existing regulation and policy for these streams.

C. Low Priority Streams

1. <u>Remaining Unlisted Streams Within the Watershed</u>
Nothing is proposed outside of existing regulation and policy for these streams.

III. Monitoring Plan

BLM will provide Idaho DEQ—Pocatello Regional Office with an annual Monitoring Summary showing monitoring information and/or management actions on these streams gathered during the current year.

A. High Priority Streams.

Only three streams, the Blackfoot River, Wolverine Creek and Jones Creek are high priority streams for BLM within this watershed due to ownership pattern. Table 1 lists the stream miles managed by BLM and pollutant listed for these 303(d)-listed streams.

<u>Table 1. BLM High Priority Streams within the Blackfoot River Watershed</u>

303(d)-Listed Stream	BLM Length (Miles)	Listed Pollutant
Blackfoot River	22	Sediment, nutrients
Wolverine Creek	2	Sediment, nutrients
Jones Creek	0.5	Nutrients

1. Blackfoot River

Public lands administered by BLM on the Blackfoot River begins below the BIA dam on Blackfoot Reservoir and continues to the Just Canal diversion, about 2 miles below the mouth of Wolverine Creek. Here, DEQ is calling for a reduction of 19.9 tons/year total phosphorus and an 80% stream bank stability goal for sediment. BLM manages approximately 22 miles of stream bank along this river. These lands vary from gently sloping banks with sparse vegetation to dense riparian/wetland communities, to steep, basalt rock canyons with no road nor livestock access to the banks.

BLM does not control nor influence any of the Blackfoot Reservoir flow releases--BIA is responsible for this at this dam. Therefore, BLM has little impact on the channel

bed substrate changes caused by flow alteration. BLM does, however, have direct impact on the stream bank habitat which does influence sediment input to the river. Impacts are caused by recreational activities, livestock grazing and undeveloped roads.

BLM's goals here are driven by the TMDL and our own riparian and Healthy Rangelands policies. BLM has three goals for these river banks to improve habitat and therefore, water quality: 80% stream bank stability; riparian/wetland areas moving towards Proper Functioning Condition; and a 4" stubble height of key riparian species. Eighty percent stream bank stability and a proper functioning condition would reduce bank soil erosion and may reduce suspended sediment in the river. A proper functioning condition riparian system would store excess sediment and buffer banks from high flows, protecting water quality from excessive sediment and total phosphorus loading. About 3-5 BLM stream reaches will be monitored for PFC and stream bank stability every 3-5 years. Stubble height of key riparian species will be monitored each year along key areas during the grazing season to determine grazing use and impact. The Pocatello Field Office will select these stream reaches (for PFC and stream bank stability) and key areas (for stubble height) and conduct the monitoring.

2. Wolverine and Jones Creeks

BLM manages just over 2 miles of Wolverine Creek. About 2 miles of stream are in the "narrows" canyon section beginning about 1.1 miles above the Jones Creek confluence. Two other small reaches are below both the Jones Creek confluence and the county road. The furthest downstream parcel includes the mouth of Wolverine Creek on the Blackfoot River. The TMDL also mentions that Jones Creek, a tributary to Wolverine Creek, contributes about 25% of the total phosphorus loading into Wolverine Creek. BLM manages about 0.5-miles of Jones Creek and about 0.5-miles of the unnamed tributary to Jones Creek.

Impacts to Wolverine Creek include recreation and OHV use, livestock grazing and county road maintenance activities. Upstream on private lands, besides the impacts mentioned, additional watershed impacts that influence the streams may include septic systems, forestry practices and weed invasion.

The TMDL calls for a reduction of 6.7 tons/year total phosphorus and an 80% stream bank stability goal for sediment. BLM has three goals for both Wolverine Creek and Jones Creek: 80% stream bank stability; riparian/wetland areas moving towards PFC; and 4" stubble height of key riparian species.

About half of the polygons on Wolverine and Jones Creek will be monitored annually for stubble height and every 3-5 years for PFC and stream bank stability.

B. Medium Priority Streams

1. All remaining 303(d) listed streams (from the 1998 list) within the Blackfoot River watershed are listed in Table 2.

<u>Table 2. BLM's Medium Priority Streams in the Blackfoot River</u> Watershed

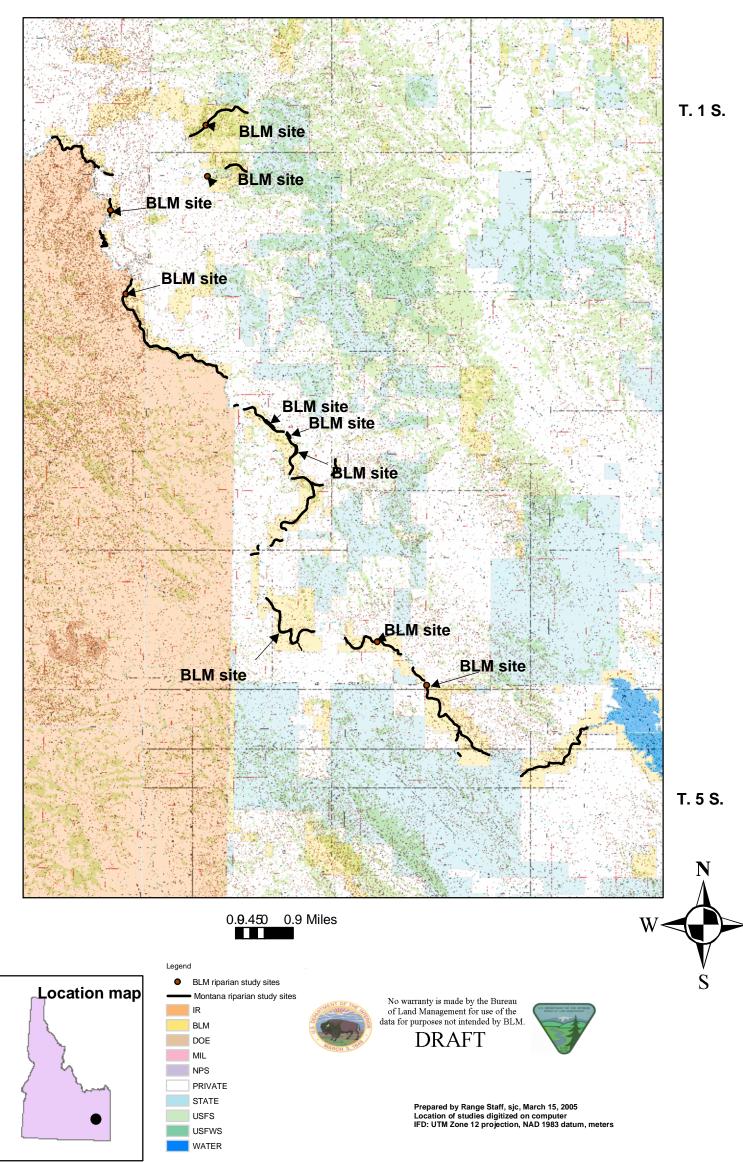
Stream	BLM Stream Miles	Pollutant
Brush Creek	0.3	Sediment
Dry Valley Creek	0.25	Sediment
Lanes Creek	0.25	Sediment
Meadow Creek	0.25	Sediment
Trail Creek	0.4	Sediment

Since BLM does not manage a significant length of any one of these streams, BLM's monitoring goals include: 80% stream bank stability; riparian/wetland areas moving towards PFC; and a 4" stubble height. BLM will monitor about one-half of these stream polygons for stream bank stability and PFC every 3-5 years and stubble height every 1-2 years. All stream reaches and key areas will be selected and monitored by the Pocatello Field Office. BLM will also measure stubble height at key areas annually during the grazing season.

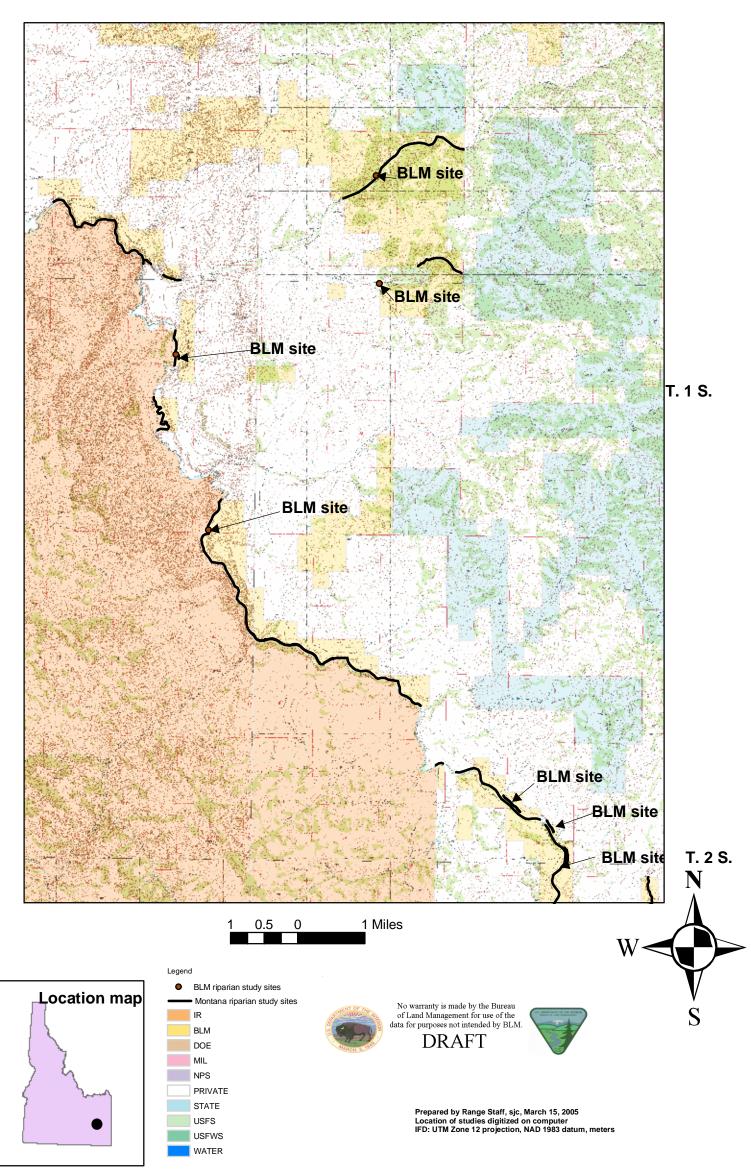
C. Low Priority Streams

1. All remaining unlisted streams on BLM within the Blackfoot River watershed. These low priority streams will be monitored for PFC during scheduled Standards and Guides allotment assessments every 5-10 years and stubble height for grazing compliance as time permits. All stream reaches and key areas will be selected and monitored by the Pocatello Field Office.

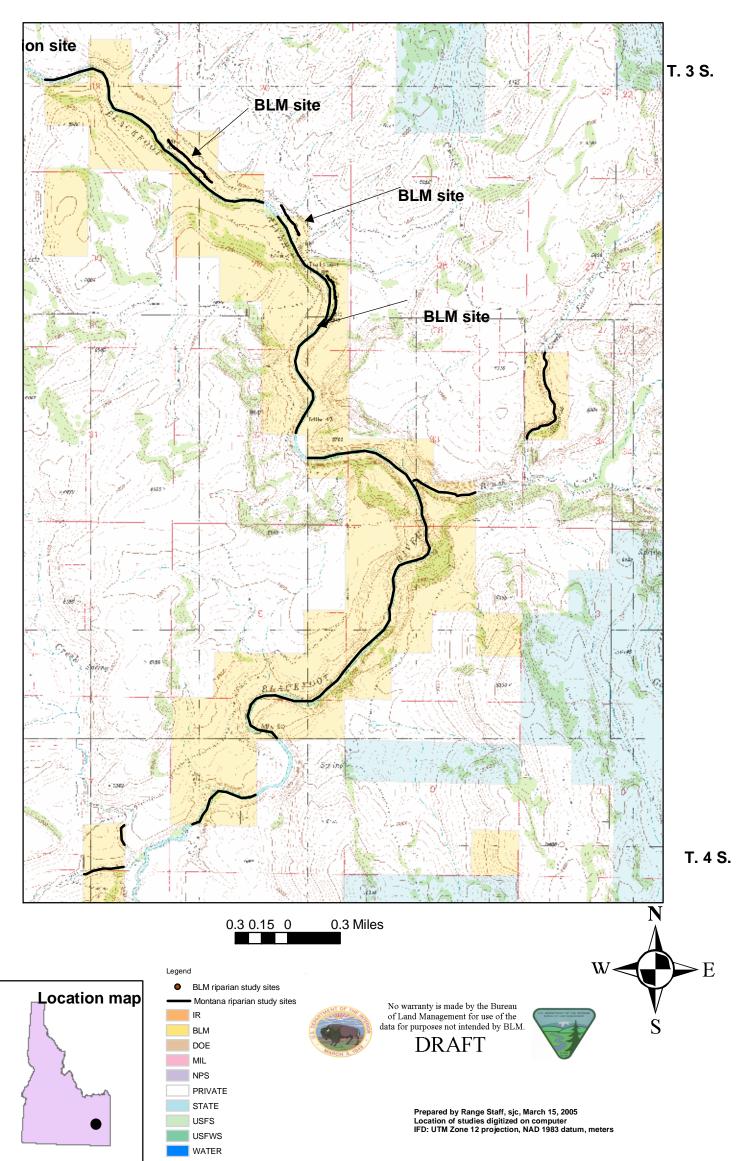
R. 37 S. R. 40 E.



R. 37 E. R. 38 E.



R. 38 E. R. 39 E.



Page 3 R. 39 E. R. 40 E. T.4 S. **BLM** site **BLM** site **BLM** site T. 5 S. 0.6 0.3 0 0.6 Miles BLM riparian study sites Location map Montana riparian study sites No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM. IR BLM **DRAFT** DOE MIL NPS PRIVATE STATE Prepared by Range Staff, sjc, March 15, 2005 Location of studies digitized on computer IFD: UTM Zone 12 projection, NAD 1983 datum, meters USFS

USFWS WATER

R. 40 E.

